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~~26. A two way asymmetric network communication system for transferring data~~

between a server and a plurality of remote devices for supporting server-client communication, the communication system comprising:

a plurality of remote interfaces associated with respective remote devices;

a downstream channel in a direct broadcast satellite network, a CATV network, or an over-the-air radio frequency transmission;

an upstream channel in a CATV network, or an over-the-air radio frequency transmission;

a control system acting to generate, for each remote interface, a respective signal that determines an amount that the remote interface may send during a certain period,

wherein each remote interface includes

a receiver that receives downstream data from the server over the downstream channel, and provides the data to the associated remote device; and

a sender that sends, during the certain period, data from the associated remote device over the upstream channel, an amount of the sent data being governed by the respective signal.

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~~27. The communication system of claim *1* wherein, for each remote interface, the control system generates the respective signal for each activation of the sender in ^{*paid each*} the remote interface.~~

28. The communication system of claim 26 wherein the control system includes a sender that sends a credit to the remote interface.

29. The communication system of claim 26 wherein the control system includes logic to make the certain period of each remote interface different from the certain period of the other remote interfaces

30. The communication system of claim 29 wherein the control system includes logic to make certain period of a remote interface mutually exclusive of the certain period of the other remote interfaces.

31. A two way asymmetric network communication system for transferring data between a server and a plurality of remote devices for supporting server-client communication, each remote device running a layered communication protocol, the communication system comprising:

a plurality of remote interfaces associated with respective remote devices;
a downstream channel in a direct broadcast satellite network, a CATV network, or an over-the-air radio frequency transmission;

~~an upstream channel in a CATV network, or an over-the-air radio frequency transmission;~~

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~~a control system acting to generate, for each remote interface, a respective signal that determines an amount that the remote interface may send during a certain period, wherein each remote interface includes~~

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~~a receiver that receives downstream data from the server over the downstream channel, and provides the data to the associated remote device, such that the downstream channel is transparent to the associated remote device; and~~

~~a sender that sends, during the certain period, data from the associated remote device over the upstream channel, such that the upstream channel is transparent to the associated remote device, an amount of the sent data being governed by the respective signal.~~

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32. The communication system of claim *6* 31 wherein, for each remote interface, the control system generates the respective signal for each activation of the sender in *said each* the remote interface.

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~~33. The communication system of claim 31 wherein the control system includes a sender that sends a credit to the remote interface.~~

~~34. The communication system of claim 31 wherein the control system includes logic to make the certain period of each remote interface different from the certain period of the other remote interfaces~~

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~~35. The communication system of claim 31 wherein the control system includes logic to make certain period of a remote interface mutually exclusive of the certain period of the other remote interfaces.~~

36. A two way asymmetric network communication system for transferring data between a server and a plurality of remote devices for supporting server-client communication, the communication system comprising:

a plurality of remote interfaces associated with respective remote devices;

a downstream channel in a direct broadcast satellite network, a CATV network, or an over-the-air radio frequency transmission;

an upstream channel in a CATV network, or an over-the-air radio frequency transmission;

a control system, common to the downstream and upstream channels, the control system acting to generate, for each remote interface, a respective signal that determines an amount that the remote interface may send during a certain period,

wherein each remote interface includes

a receiver that receives downstream data from the server over the downstream channel, and provides the data to the associated remote device; and

a sender that sends, during the certain period, data from the associated remote device over the upstream channel, an amount of the sent data being governed by the respective signal.

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37. The communication system of claim 36 wherein, for each remote interface, the control system generates the respective signal for each activation of the sender in ^{paid each} the remote interface.

~~38. The communication system of claim 36 wherein the control system includes a sender that sends a credit to the remote interface.~~

39. The communication system of claim 36 wherein the control system includes logic to make the certain period of each remote interface different from the certain period of the other remote interfaces

40. The communication system of claim 36 wherein the control system includes logic to make certain period of a remote interface mutually exclusive of the certain period of the other remote interfaces.

41. A two way asymmetric network communication system for transferring data between a server and a plurality of remote devices for supporting server-client communication, each remote device running a layered communication protocol, the communication system comprising:

a plurality of remote interfaces associated with ~~respective remote devices,~~

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a downstream channel in a direct broadcast satellite network, a CATV network, or an over-the-air radio frequency transmission;

an upstream channel in a CATV network, or an over-the-air radio frequency transmission;

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a control system, common to the downstream and upstream channels, the control system acting to generate, for each remote interface, a respective signal that determines an amount that the remote interface may send during a certain period,

wherein each remote interface includes

a receiver that receives downstream data from the server over the downstream channel, and provides the data to the associated remote device, such that the downstream channel is transparent to the associated remote device; and

a sender that sends, during the certain period, data from the associated remote device over the upstream channel, such that the upstream channel is transparent to the associated remote device, an amount of the sent data being governed by the respective signal.

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42. The communication system of claim 41 wherein, for each remote interface, the control system generates the respective signal for each activation of the sender in ^{paid each} the remote interface.

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~~43. The communication system of claim 41 wherein the control system includes a sender that sends a credit to the remote interface.~~

~~44. The communication system of claim 41 wherein the control system includes logic to make the certain period of each remote interface different from the certain period of the other remote interfaces~~

45. The communication system of claim 41 wherein the control system includes logic to make certain period of a remote interface mutually exclusive of the certain period of the other remote interfaces.

46. A method of operating a two way asymmetric network communication system for transferring data between a server and a plurality of remote devices for supporting server-client communication, the communication system including a plurality of remote interfaces associated with respective remote devices, a downstream channel in a direct broadcast satellite network, a CATV network, or an over-the-air radio frequency transmission, an upstream channel in a CATV network, or an over-the-air radio frequency transmission, the method comprising:

generating, for each remote interface, a respective signal that determines an amount that the remote interface may send during a certain period, and the following steps, performed by each remote interface, of

receiving downstream data from the server over the downstream channel, and providing the data to the associated remote; and

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~~sending, during the certain period, data from the associated remote device over the upstream channel, an amount of the sent data being governed by the respective signal.~~

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~~47~~. The method of claim *21* ~~46~~ wherein, for each remote interface, the generating step is performed for each performance of the sending step.

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~~48~~. The method of claim *21* ~~46~~ wherein the certain period for *paid each* ~~a~~ remote interface corresponds to a time between sending a credit to the remote interface and receiving another signal indicating that the remote device has completed a set of transmissions.

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~~49~~. The method of claim ~~46~~ wherein the certain period of each remote interface is different from the certain period of the other remote interfaces

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50. The method of claim 46 wherein the certain period of a remote interface is mutually exclusive of the certain period of the other remote interfaces.

51. A method of operating a two way asymmetric network communication system for transferring data between a server and a plurality of remote devices for supporting server-client communication, each remote device running a layered communication protocol, the communication system including a plurality of remote interfaces associated with respective

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remote devices, a downstream channel in a direct broadcast satellite network, a CATV network, or an over-the-air radio frequency transmission, an upstream channel in a CATV network, or an over-the-air radio frequency transmission, the method comprising:

generating, for each remote interface, a respective signal that determines an amount that the remote interface may send during a certain period, and the following steps, performed by each remote interface, of

receiving downstream data from the server over the downstream channel, and providing the data to the associated remote device, such that the downstream channel is transparent to the associated remote device; and

sending, during the certain period, data from the associated remote device over the upstream channel, such that the upstream channel is transparent to the associated remote device, an amount of the sent data being governed by the respective signal.

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52. The method of claim 51 wherein, for each remote interface, the generating step is performed for each performance of the sending step.

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53. The method of claim 51 wherein the certain period for a remote interface corresponds to a time between sending a credit to the remote interface and receiving another signal indicating that the remote device has completed a set of transmissions.

~~54. The method of claim 51 wherein the certain period of each remote interface is~~
different from the certain period of the other remote interfaces

55. The method of claim 51 wherein the certain period of a remote interface is mutually exclusive of the certain period of the other remote interfaces.

56. A method of operating a two way asymmetric network communication system for transferring data between a server and a plurality of remote devices for supporting server-client communication, the communication system including a plurality of remote interfaces associated with respective remote devices, a downstream channel in a direct broadcast satellite network, a CATV network, or an over-the-air radio frequency transmission, an upstream channel in a CATV network, or an over-the-air radio frequency transmission, and a control system common to the downstream and upstream channels, the method comprising the step, performed by the control system, of

generating, for each remote interface, a respective signal that determines an amount that the remote interface may send during a certain period, and the following steps, performed by each remote interface, of

receiving downstream data from the server over the downstream channel, and providing the data to the associated remote device; and

Sub B8 ~~sending, during the certain period, data from the associated remote device over the upstream channel, an amount of the sent data being governed by the respective signal.~~

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~~57.~~ The method of claim *31* ~~56~~ wherein, for each remote interface, the generating step is performed for each performance of the sending step.

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~~58.~~ The method of claim *31* ~~56~~ wherein the certain period for *said each* remote interface corresponds to a time between sending a credit to the remote interface and receiving another signal indicating that the remote device has completed a set of transmissions.

Sub B8 ~~59. The method of claim 56 wherein the certain period of each remote interface is different from the certain period of the other remote interfaces~~

60. The method of claim 56 wherein the certain period of a remote interface is mutually exclusive of the certain period of the other remote interfaces.

61. A method of operating a two way asymmetric network communication system for transferring data between a server and a plurality of remote devices for supporting server-client communication, each remote device running a layered communication protocol, the communication system including a plurality of remote interfaces associated with respective

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~~remote devices, a downstream channel in a direct broadcast satellite network, a CATV network,~~
or an over-the-air radio frequency transmission, an upstream channel in a CATV network, or an
over-the-air radio frequency transmission, and a control system common to the downstream and
upstream channels, the method comprising the step, performed by the control system, of
generating, for each remote interface, a respective signal that determines an amount that
the remote interface may send during a certain period, and
the following steps, performed by each remote interface, of
receiving downstream data from the server over the downstream channel, and providing
the data to the associated remote device, such that the downstream channel is transparent to the
associated remote device; and
sending, during the certain period, data from the associated remote device over the
upstream channel, such that the upstream channel is transparent to the associated remote device,
an amount of the sent data being governed by the respective signal.

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~~62~~. The method of claim *36* wherein, for each remote interface, the generating step is
performed for each performance of the sending step.